

714

Notice of Allowability

Application No.

10/696,104

Examiner

Lucy Thomas

Applicant(s)

POLLOCK ET AL.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/09/2007.
2. ☒ The allowed claim(s) is/are 21-40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
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| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material. | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In Claim 33, line 10, replace "and" with "or".

2. The following is an examiner's statement of reasons for allowance: Regarding Claim 21, Boksjo et al. (US 3, 487, 261) discloses a system for over voltage protection of a device comprising a spark gap discharge device, a diode, wherein the spark gap discharge device and the diode are connected in series. Boksjo does not disclose an electromagnetic inductive device, and a resistor in series with the diode and the spark gap to form a protective discharge means for protectively discharging electrical energy, wherein the protective discharge means is connected in parallel across said electro-magnetic inductive device for preventing the electro-magnetic inductive device from developing destructively high voltage levels that occur during an abrupt change in current flow through the electro-magnetic inductive device.

Goodman (US 6, 088, 210) teaches that it is known in the art to use a spark gap device for protecting an energized inductive device, an industrial electromagnet from the effects of dissipating stored magnetic energy when supply voltage to the electromagnet is removed while the electromagnet is energized.

Dibble et al. (US 6, 070, 568) discloses a spark gap circuit comprising a resistance R1 in series with a diode D1 and a spark gap 13, but does not form a protective discharge means (Dibble's diode, spark gap, resistor combination is used in an ignition circuit).

The combined feature, a spark gap discharge device, diode, and a resistor, all connected in series to form a protective discharge means for protectively discharging electrical energy, when connected in parallel across an electromagnetic inductive device is not disclosed by the Prior Art of Record, and therefore, allowable.

Regarding Claim 33, Boksjo discloses a system for protecting a device (a thyristor) from a high voltage power supply comprising a spark gap, a diode connected in series with the spark gap that define a discharge device, wherein the discharge device is connected across the device to be protected.

Boksjo does not disclose an electromagnetic inductive device, and the power supply that energizes the inductive device, wherein the inductive device is operable to either be energized by the power supply so that the diode is reversed-biased to prevent current flow through the inductive discharge device, or energized so that the diode is forward-biased to permit energy stored by the inductive discharge device to be discharged by the spark gap when the inductive device sees an open circuit across the power supply.

Goodman teaches that it is known in the art to use a spark gap device for protecting an energized inductive device, an industrial electromagnet, from high voltage power supply open circuit, from the effects of dissipating stored magnetic energy when

supply voltage to the electromagnet is removed while the electromagnet is energized, but does not teach a diode and spark gap series combination used as discharge device.

This feature, a diode connected in series with a spark gap that define an inductive discharge device, connected across the terminals of the inductive device, to protect the device from open circuit, is not disclosed by the Prior Art of Record, and therefore, allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy Thomas whose telephone number is 571-272-6002. The examiner can normally be reached on Monday - Friday 8:00 AM - 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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April 27, 2007